

ABSTRACT OF THE DISCLOSURE

The lateral pnp transistor encompasses a p-type semiconductor substrate, an n-type first buried region disposed on the semiconductor substrate, an n-type uniform base region disposed on the first buried region, an n-type first plug region disposed in the uniform base region, a p-type first emitter region and a first collector region disposed in and at the top surface of the uniform base region, a graded base region disposed in the uniform base region and a first base contact region disposed in the first plug region. The graded base region encloses the bottom and the side of the first main electrode region. The doping profile in the graded base region intervening between the first emitter region and the first collector region is such that the impurity concentration is gradually decreases towards the second main electrode region from the first main electrode region.

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